SIEMENS

Data sheet 3RT2015-2AP61



CONTACTOR, AC-3, 3KW/400V, 1NO, AC 220V 50HZ 240V 60 HZ, 3-POLE, SZ S00 SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	3RT2 contactor

General technical data:			
Insulation voltage			
Rated value	V	690	
Degree of pollution		3	
Surge voltage resistance Rated value	kV	6	
Mechanical service life (switching cycles)			
 of the contactor typical 		30 000 000	
 of the contactor with added electronics- compatible auxiliary switch block typical 		5 000 000	
 of the contactor with added auxiliary switch block typical 		10 000 000	
Thermal short-time current restricted to 10 s	Α	56	
Protection class IP			
• on the front		IP20	
• of the terminal		IP20	
Equipment marking			
• acc. to DIN EN 61346-2		Q	
● acc. to DIN EN 81346-2		Q	

Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Operating voltage	

 at AC-3 Rated value maximum 	V	690
Operating current		
• at AC-1		
 — at 400 V at ambient temperature 40 °C Rated value 	А	18
 up to 690 V at ambient temperature 40 °C Rated value 	Α	18
 up to 690 V at ambient temperature 60 °C Rated value 	Α	16
• at AC-2 at 400 V Rated value	Α	7
• at AC-3		
— at 400 V Rated value	Α	7
— at 500 V Rated value	Α	6
— at 690 V Rated value	Α	4.9
• at AC-4 at 400 V Rated value	Α	6.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	Α	15
— at 110 V Rated value	Α	1.5
— at 220 V Rated value	Α	0.6
— at 440 V Rated value	Α	0.42
— at 600 V Rated value	Α	0.42
• at DC-3 at DC-5		
— at 24 V Rated value	Α	15
— at 110 V Rated value	Α	0.1
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	15
— at 110 V Rated value	Α	8.4
— at 220 V Rated value	Α	1.2
— at 440 V Rated value	Α	0.6
— at 600 V Rated value	Α	0.5
• at DC-3 at DC-5		
— at 110 V Rated value	Α	0.25
— at 24 V Rated value	Α	15
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	15
— at 110 V Rated value	Α	15
— at 220 V Rated value	Α	15
— at 440 V Rated value	Α	0.9
— at 600 V Rated value	Α	0.7

• at DC-3 at DC-5		
— at 110 V Rated value	Α	15
— at 220 V Rated value	Α	1.2
— at 24 V Rated value	Α	15
— at 440 V Rated value	Α	0.14
— at 600 V Rated value	Α	0.14
Operating power		
• at AC-1 at 400 V Rated value	kW	11
• at AC-2 at 400 V Rated value	kW	3
• at AC-4 at 400 V Rated value	kW	3
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	6
— at 230 V Rated value	kW	6.3
— at 400 V at 60 °C Rated value	kW	10.5
— at 690 V at 60 °C Rated value	kW	18
— at 690 V Rated value	kW	19
• at AC-3		
— at 230 V Rated value	kW	1.5
— at 400 V Rated value	kW	3
— at 690 V Rated value	kW	4
Operating power for ≥ 200000 operating cycles at AC-4		
● at 400 V Rated value	kW	1.15
● at 690 V Rated value	kW	1.15
Operating frequency		
• at AC-3 maximum	1/h	750
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
● at 50 Hz Rated value	V	220
● at 60 Hz Rated value	V	240
Operating range factor control supply voltage rated		
value of the magnet coil with AC		
● at 50 Hz		0.8 1.1
● at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		0
Number of NO contacts		

• for auxiliary contacts			
instantaneous contact		1	
Product expansion Auxiliary switch		Yes	
Operating current at AC-15			
● at 230 V Rated value	Α	10	
● at 400 V Rated value	Α	3	
● at 690 V Rated value	Α	1	
Operating current			
• at DC-12 at 125 V Rated value	Α	2	
• at DC-12 at 220 V Rated value	Α	1	
● at DC-12 at 600 V Rated value	Α	0.15	
• at DC-13 at 125 V Rated value	Α	0.9	
• at DC-13 at 220 V Rated value	Α	0.3	
• at DC-13 at 600 V Rated value	Α	0.1	
Operating current	_		
• at DC-12			
— at 60 V Rated value	Α	6	
— at 110 V Rated value	Α	3	
• at DC-13			
— at 24 V Rated value	Α	10	
— at 60 V Rated value	Α	2	
— at 110 V Rated value	Α	1	
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)	
UL/CSA ratings:			
Full-load current (FLA) for three-phase AC motor			
at 480 V Rated value	Α	4.8	
at 600 V Rated value	Α	6.1	
yielded mechanical performance [hp]			
 for single-phase AC motor at 110/120 V Rated value 	metric hp	0.25	
 for single-phase AC motor at 230 V Rated value 	metric hp	0.75	
 for three-phase AC motor at 200/208 V Rated value 	metric hp	1.5	
• for three-phase AC motor at 220/230 V Rated value	metric hp	2	
• for three-phase AC motor at 460/480 V Rated value	metric hp	3	
• for three-phase AC motor at 575/600 V Rated	metric	5	

Short-circuit:

Contact rating of the auxiliary contacts acc. to UL

A600 / Q600

hp

Design of the fuse link

- for short-circuit protection of the main circuit
 - with type of assignment 1 required
 - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A

fuse gL/gG: 10 A

mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/-
		22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail according to DIN EN 50022
 Side-by-side mounting 		Yes
Height	mm	69.5
Width	mm	45
Depth	mm	73
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	6
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6

Connections/ Terminals:		
Type of electrical connection		
• for main current circuit	s	spring-loaded terminals
 for auxiliary and control current circuit 	S	spring-loaded terminals
Type of connectable conductor cross-section		

• for main contacts		
— single or multi-stranded		2x (0,5 4 mm²)
 finely stranded with core end processing 		2x (0.5 2.5 mm²)
 finely stranded without core end 		2x (0.5 2.5 mm²)
processing		
 for AWG conductors for main contacts 		2x (20 12)
for auxiliary contacts		
— single or multi-stranded		2x (0,5 4 mm²)
 finely stranded with core end processing 		2x (0.5 2.5 mm²)
 finely stranded without core end processing 		2x (0.5 2.5 mm²)
 for AWG conductors for auxiliary contacts 		2x (20 12)
Apparent pick-up power of the magnet coil with AC		
● at 50 Hz	V·A	27
● at 60 Hz	V·A	24.3
Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
 with low demand rate acc. to SN 31920 	%	40
 with high demand rate acc. to SN 31920 	%	73
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
Product function Mirror contact acc. to IEC 60947-4-1		Yes
Note		with 3RH29
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe
Mechanical data:		
Size of contactor		S00
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during operation	°C	-25 + 60
during storage	°C	-55 + 80
Certificates/ approvals:		

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



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Shipping Approval

Certificates

Special Test Certificate







other







LRS

Shipping Approval







Environmental Confirmations

Confirmation



Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT20152AP61}$

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT20152AP61/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT20152AP61&lang=en



